

Volume 3. Air Operator Technical Administration

CHAPTER 1. OPERATIONS SPECIFICATIONS

SECTION 5. OPERATIONS SPECIFICATIONS PART C - AIRPLANE TERMINAL INSTRUMENT PROCEDURES AND AIRPORT AUTHORIZATIONS AND LIMITATIONS

81. GENERAL. Part C is issued to operators who conduct Title 14 of the Code of Federal Regulations (14 CFR) Part 121 or Part 135 operations with fixed wing airplanes. It is not issued to Part 135 operators who conduct only helicopter operations. Instrument Flight Rules (IFR) helicopter operators are issued Part H. Part C is not usually issued to Part 135 on-demand operators who are restricted to Visual Flight Rules (VFR) only operations. In rare situations OpSpec C070 of Part C is issued to Part 135 VFR only operators who are authorized to conduct commuter operations.

83. PART C OPERATIONS SPECIFICATIONS PARAGRAPHS.

OPSPEC C050. - SPECIAL PILOT-IN-COMMAND AIRPORT QUALIFICATIONS.

A. OpSpec C050 is used to authorize part 121 air carrier certificate holders to conduct IFR operations into special airports requiring special airport qualification in accordance with the provisions and limitations of the OpSpec and 14 CFR Section 121.445. OpSpec C050 issued to Part 121 certificate holders that conduct operations into special airports requiring special airport qualifications. For detailed information refer to Order 8400.10, volume 4, chapter 3, section 5, Selected Practices, paragraph 1031, Special Airports Requiring Special Qualification.

B. Air carriers conducting domestic, flag, and supplemental operations require pilots-in-command (PIC) to be qualified for operations into special PIC qualification airports. These PICs must be qualified in accordance with section 121.445.

(1) The amendment added a pictorial means as an additional method of qualifying PICs for operations into special airports requiring special PIC qualification.

(2) OpSpec C050, Special PIC Airport Qualification, is used to authorize special PIC qualification airports for domestic, flag, and supplemental part 121 air carriers.

(3) The list of Special Qualification Airports can be found in the OPSS guidance subsystem in association with OpSpec C050 and on the <http://www.opspecs.com> web site.

C. If both the ceiling and the visibility minimums are not satisfied as detailed in section 121.445(c), then the qualification requirements of section 121.445(b) apply.

Section 121.445(b) specifies that for a pilot to serve as PIC on a flight to a special qualification airport, the PIC must have the benefit of one of the following:

(1) The PIC, within the preceding 12 calendar months, has made a takeoff and landing at that airport while serving as a pilot flight crewmember;

(2) The second in command (SIC), within the preceding 12 calendar months, has made an takeoff and landing at that airport while serving as a pilot flight crewmember; or

(3) Within the preceding 12 calendar months, the PIC has qualified by using pictorial means acceptable to the Administrator for that airport.

D. An assessment conducted by the operator to determine the nature and complexity of certain factors associated with the airport (i.e., high altitude, foreign airport, specific terrain features, unique weather patterns may be present singly or in combination) determines whether the airport should be included in the air carrier's airport listing in OpSpec paragraph C067, "Special Airports" or the provisions of OpSpec C050, "Special PIC Qualification Airports" apply. For instance, an airport with an approved Instrument Flight Rules (IFR) and or Visual Flight Rules (VFR) approach/departure procedure and an unusual characteristic such as a nearby politically sensitive international boundary, or high terrain may require designation as a special PIC qualification airport. In this case, the airport would need to be listed in OpSpec C067 and the provisions of OpSpec C050 also apply. Refer to Order 8400.10, Vol. 4, Chap. 3, SECTION 5, Selected Practices, paragraph 1031, Special PIC Qualification Airports, and Order 8400.10, Vol. 3, Chapter 1, Section 5, OpSpec C067.

E. The air carriers in conjunction with AFS-200 will determine any airport additions or deletions from the Special Airport Qualification list. These changes will be made on a quarterly basis.

OPSPEC C051 - TERMINAL INSTRUMENT PROCEDURES. (HBAT 99-17 TO BE INCORPORATED). C051 is issued to all airplane operators who conduct any flight operations under IFR. IFR operators whose operations are restricted to the 50 United States are only issued C051a(1), (2), and (3). The whole paragraph

is issued to operators who are authorized to conduct any IFR operation outside of the United States. Federal Aviation Administration (FAA) Order 8260.31B, Foreign Terminal Instrument Procedures, provides direction and guidance on acceptance of foreign terminal instrument procedures. Additional information concerning terminal instrument procedures is in Order 8400.10, volume 4, chapter 2, section 3. For helicopter authorization, see OpSpec H101.

OPSPEC C052 - BASIC INSTRUMENT APPROACH PROCEDURE AUTHORIZATIONS - ALL AIRPORTS. (HBAT 99-17 TO BE INCORPORATED).

A. C052 specifies the types of instrument approaches the operator is authorized to conduct and prohibits the use of other types of instrument approaches.

(1) Before authorizing a type of instrument approach procedure, the Principal Operations Inspector (POI) must ensure the operator has established the aircraft system eligibility and the flightcrew training and checking requirements, and has revised the training and operations manuals, as applicable, for the types of approaches to be authorized.

(2) See Order 8400.10, volume 4, chapter 2 for information on required training for various types of approaches.

(3) All the approaches approved by C052 must be published in accordance with 14 CFR part 97 or the foreign State authority.

(4) For part 135 operations, if the visibility and ceiling are below minimums, the reported RVR may be used if that RVR is at or above the minimums for the instrument procedure being used and authorized for that certificate holder.

B. Three types of instrument approach procedures may be authorized in C052:

(1) Column one provides for the authorization of non-precision instrument approach procedures without vertical guidance (approaches other than Instrument Landing System (ILS) and Microwave Landing System (MLS)). Non-precision approaches must be trained and conducted in accordance with an approved procedure that assures descent will not go below minimum descent altitude (MDA) unless the required visual references for continuing the approach are present.

(2) Column two provides for the authorization of precision-like instrument approach procedures with vertical guidance (approaches other than ILS and MLS). These are called precision-like approaches because they provide vertical guidance but are not as accurate as true precision approaches. These precision-like approach procedures are

trained using an approved method that allows descent to a published decision altitude (DA).

(3) Column three provides for the authorization of precision instrument approach procedures (ILS, MLS, and GLS approaches) that provide vertical guidance.

C. Barometric Vertical Navigation (BARO-VNAV) approach operations (referred to as area navigation (RNAV) with vertical guidance) may be authorized for all applicable certificate holders and operators in accordance with the guidance in Order 8400.10, vol. 4, chap. 2, sect. 4, paragraph 551, E(1) and paragraph 555, C.

(1) *Air Carrier Aircraft/Commercial Operator Approval.* Once a 14 CFR Part 121, 125, 129, or 135 certificate holder or operator has established the aircraft system eligibility, the flightcrew training and checking requirements, and has revised the training and operations manuals, as applicable, the POI may give approval using this RNAV equipment to fly to the lateral navigation (LNAV)/VNAV DA as shown on the published IAP.

(2) To authorize these precision-like approaches that provide vertical guidance, select "RNAV (GPS)" (for Part 97 approaches) or "RNAV (GNSS)" (for foreign approaches) for insertion into column two of C052.

D. *Precision Runway Monitoring (PRM).* The FAA began the Multiple Parallel Approach Program to research whether simultaneous instrument landing system (ILS) approaches to parallel runways would improve capacity. The objective was to achieve improvements in airport arrival rates through the conduct of simultaneous closely spaced-parallel approaches. That objective is being met using PRM.

(1) *ILS/PRM and LDA/PRM Approaches.* Where parallel runway centerlines are 4,300 feet apart or less, but no less than 3,000 feet, simultaneous ILS approaches may be conducted. Similarly, where parallel runway centerlines are 3,000 feet apart or less, but no less than 750 feet, simultaneous offset instrument approaches (SOIA) may be conducted with ILS approaches. Those approaches are labeled "ILS/PRM" and "LDA/PRM," respectively, on instrument approach charts. Air traffic control (ATC) provides an air traffic controller using special PRM radar during these approaches. That controller is known as the final monitor controller.

(2) *The Breakout Maneuver.* Working with industry, the FAA conducted extensive analysis of simulation data and determined that the implementation of PRM and SOIA approach operations to closely spaced parallel runways requires additional crew training. The primary focus of this training is to raise each pilot's situational awareness in ILS/PRM and LDA/PRM operations. The breakout maneuver must be flown manually.

(a) *Traffic Alert.* One important element of the additional training is the pilot's understanding of the difference between a normal missed approach initiated by a pilot and a breakout initiated by a PRM final monitor controller. It must be clear to flightcrews that the words "Traffic Alert," when used by the final monitor controller, signal critical instructions that the pilot must act on promptly to preserve adequate separation from an airplane straying into the adjoining approach path.

(b) *ATC Breakout Maneuver Command to Turn and/or Descend, Climb, or Maintain Altitude.* The flightcrew must immediately follow the final monitor controller's vertical (climb/descend/maintain altitude) and horizontal (turn) commands. If the flightcrew is operating Traffic Alert and Collision Avoidance System (TCAS) in the traffic advisory (TA)/resolution advisory (RA) mode and receives a TCAS RA at any time while following the final monitor controller's command, the flightcrew will simultaneously continue to turn to the controller's assigned heading and follow the vertical guidance provided by the TCAS RA.

(c) *Time-to-Turn Standard.* Regardless of airplane type, tests and data analysis revealed that pilots must be able to achieve a rate of turn of 3 degrees per second within 8 seconds of receiving a breakout command. The air carrier must show that its pilots can readily meet this time-to-turn standard prior to the POI authorizing ILS/PRM or LDA/PRM approaches in OpSpec paragraph C052. Flightcrews are required to manually fly the breakout maneuver unless otherwise approved by AFS-200 (AFS-200 must have AFS-400 concurrence to approve breakout in auto modes). The air carrier should demonstrate its ability to meet this standard by having representative pilots perform the breakout maneuver while the POI or the POI's designated representative observes. The demonstration should conform to procedures contained in the air carrier's approved operating manual for its flightcrews.

NOTE: In a breakout, ATC will never command a descent below the applicable minimum vector altitude (MVA), thus assuring that no flight will be commanded to descend below 1,000 feet above the highest obstacle during a breakout.

(3) *ILS/PRM, LDA/PRM, and the Use of TCAS.* TCAS may be operated in TA/RA mode while executing ILS/PRM or LDA/PRM approaches. However, when conducting these operations, pilots must understand that the final monitor controller's instruction to turn is the primary means for ensuring safe separation from another airplane. Pilots must bear in mind that TCAS does not provide separation in the horizontal plane; TCAS accomplishes separation by commands solely in the vertical plane. Therefore, during final approach only the final monitor controller has the capability to command a turn for lateral separation. Flightcrews are expected to follow any ATC instruction to turn.

(a) *ATC command to turn with TCAS RA.* In the unlikely event that a flightcrew should simultaneously receive a final monitor controller's command to turn and a TCAS RA, the flightcrew must follow both the final monitor controller's turn command and the TCAS RA's climb or descent command.

(b) *TCAS RA Alone.* In the extremely unlikely event that an RA occurs without a concurrent breakout instruction from the final monitor controller, the pilot should follow the RA and advise the controller of the action taken as soon as possible. In this instance, it is likely that a breakout command would follow.

(c) *TCAS not required.* An operative TCAS is not required to conduct ILS/PRM or LDA/PRM approaches.

(4) *Pilot Training.* See Order 8400.10, volume 4, chapter 2, section 4, paragraph 555, subparagraph C, for information on pilot training required prior to authorizing PRM approaches.

(5) *ILS/PRM and LDA/PRM in OpSpecs.* U.S. or foreign air carriers will be authorized ILS/PRM and/or LDA/PRM approaches in OpSpec C052. Definitions of ILS/PRM and LDA/PRM have been added to OpSpec A002.

OPSPEC C053 - STRAIGHT-IN CATEGORY I APPROACH PROCEDURES OTHER THAN ILS, MLS, OR GPS AND IFR LANDING MINIMUMS – ALL AIRPORTS. C053 specifies the lowest minimums which can be used for Category I nonprecision approach procedures other than ILS, MLS, or Global Positioning System (GPS) and IFR landing minimums at all airports. It also provides special limitations and provisions for these instrument approach procedures at foreign airports. "Category I Approach Procedures and IFR Landing Minimums - All Airports," (original title) was revised as follows:

A. C074 authorizes Straight-In Category I Precision Approach Procedures and IFR Landing Minimums - All Airports; C075, authorizes Circling Maneuvers; and C076, authorizes Contact Approaches. See Order 8400.10, volume 4, chapter 2 for information on required training for circling maneuvers and contact approaches.

B. The previous nonprecision approach table now refers to Category I nonprecision approaches as "approaches other than ILS, MLS, or GPS Landing System (GLS)."

C. For helicopter authorization, see OpSpec H103.

OPSPEC C054 - SPECIAL LIMITATIONS AND PROVISIONS FOR INSTRUMENT APPROACH PROCEDURES AND IFR LANDING MINIMUMS.

A. C054 is issued to all operators conducting operations under Part 121. It is also issued to operators who conduct turbine-powered airplane operations under Part 135. It is not

issued to Part 135 operators who do not operate turbine-powered airplanes unless that operator also conducts operations under Part 121. C054 specifies the Runway Visual Range (RVR) landing minimum equivalent to the published RVR landing minimum which must be used by high minimum pilots (less than 100 hours in aircraft type). It also specifies that before a pilot-in-command of a turbojet can conduct an instrument approach with visibility conditions reported to be below 3/4 mile or RVR 4000 (basic turbojet landing minimums), he must be specifically qualified and authorized to use standard landing minimums. See Order 8400.10, volume 4, chapter 2 for information on the qualification and authorization requirements to use the standard landing minimums.

B. RVR 3000 and its correlation of RVR5000 for high minimum pilots was added to the RVR landing minimum table to recognize the MALS/SALS visibility credit given in C053.

OPSPEC C055 - ALTERNATE AIRPORT IFR WEATHER MINIMUMS. (HBAT 99-17 TO BE INCORPORATED). C055 is issued to all Part 121 and Part 135 operators who conduct IFR operations with airplanes. This paragraph provides a two part table from which the operator, during the initial dispatch or flight release planning segment of a flight, derives alternate airport IFR weather minimums in those cases where it has been determined that an alternate airport is required.

A. The first part of the table is for airports with at least one operational navigational facility providing a straight-in nonprecision approach procedure, or a straight-in precision approach procedure, or, when applicable, a circling maneuver from an instrument approach procedure. The required ceiling and visibility is obtained by adding 400 feet to the CAT I Height Above Touchdown (HAT) or, when applicable, the authorized Height Above Airport (HAA) and by adding 1 s.m. to the authorized CAT I landing minimum.

B. The second part of the table is for airports with at least two operational navigational facilities, each providing a straight-in nonprecision approach procedure or a straight-in precision approach procedure to different suitable runways. The required ceiling and visibility is obtained by adding 200 feet to the higher CAT I HAT of the two approaches used and by adding 1/2 s.m. visibility to the higher authorized CAT I landing minimum of the two approaches used.

C. In some cases, it is possible to have higher alternate minimums when using two operational navigational facilities than when using one. For example, an airport with one straight-in nonprecision approach procedure with a HAT of 400 feet and 1 s.m. visibility would have alternate minimums of 800 feet and 2 s.m. visibility (400 feet + 400 feet and 1 s.m. + 1 s.m.). On the other hand, an airport with two straight-in approaches, one a straight-in precision

approach with a HAT of 200 feet and 1/2 s.m. visibility and the other a straight-in nonprecision approach with a HAT of 700 feet and 1 s.m. visibility, would have alternate minimums of 900 feet and 1 1/2 s.m. visibility (200 feet + 700 feet and 1/2 s.m. + 1 s.m.). Since the operations specifications require that the higher ceiling and visibility be used, the minimums for the airport with two straight-in approaches are higher than for the airport with only one straight-in approach. When this situation exists, the operator may elect to consider the airport as having only one straight-in approach procedure and may add the higher buffer requirement (400 feet and 1 s.m.) to whichever straight-in approach procedure provides for the lowest possible ceiling and visibility minimums.

D. Except for Extended Range Operations (ER-OPS), two suitable runways may be the different ends of the same physical runway surface (such as, runway 4 and runway 22 are two different runways). When using an airport as an alternate in ER-OPS operations in accordance with OpSpecB042, two separate physical surfaces must be used. The word suitable is defined in the latest version of Advisory Circular (AC) 120-42, Extended Range Operation With Two-Engine Airplanes (ETOPS).

E. OpSpec paragraph C055 (see revision history in the OPSS guidance subsystem) now allows credit for alternate minima based on Category (CAT) II or CAT III capability. This change is located in the Alternate Airport Table in row three. Flightcrews having that capability may take credit for CAT II/III-qualified aircraft and adjust minimums accordingly. The alternate minimums are based on CAT III engine inoperative requirements. The following are some but not all of those requirements. See criteria in AC 120-28D for further engine inoperative requirements.

- (1) Aircraft is capable of engine inoperative CAT III.
- (2) Appropriate procedures are established.
- (3) Performance and obstruction clearance information is provided to the flightcrew.
- (4) Appropriate aircraft configuration, wind limits, and other appropriate information is provided to the flightcrew.

F. Question: "Does the FAA consider an ILS facility which contains a single transmitter frequency for an ILS, but with two different ILS identifications (depending on which runway is being used) as one or two 'navigational facilities?'"

(1) The words "two operational facilities" have always meant that in the event there is a single failure of one facility, the other would be operational. In the situation where both ILS facilities share a single transmitter, it would be considered "one operational navigational facility," since

both ILSs would become inoperative in the event of a single transmitter failure.

(2) The two ILS identifiers would have to be different even though the ILS transmitter frequency is the same for both. The charts should tell pilots whether there is one frequency or two. Thus, one or two navigational facilities.

G. For helicopter authorizations, see OpSpec H105.

OPSPEC C056 - IFR TAKEOFF MINIMUMS, PART 121 OPERATIONS - ALL AIRPORTS. (HBAT 99-17 TO BE INCORPORATED). C056 is issued to all operators who conduct operations under Part 121.

A. C056 did not change in policy but was split into two paragraphs for programming purposes in the new OPSS: C056 "IFR Standard Takeoff Minimums, 14 CFR Part 121 (125) Airplane Operations - All Airports" and C078, "IFR Lower Than Standard Takeoff Minimums, 14 CFR Part 121 (125) Airplane Operations - All Airports."

B. If an operator is not authorized to use lower than standard takeoff minimums, C078 will not be issued. See Order 8400.10, volume 4, chapter 2 (TBD) for information concerning requirements an operator must meet before being authorized to use lower than standard takeoff minimums. If an operator conducts operations under both Parts 121 and 135, C056 and C057 may need to be issued. For more information, see the following:

- 14 CFR § 121.649
- 14 CFR § 121.651(a)(1)
- 14 CFR § 91.175(f)
- HBAT 98-17, Changes in OpSpec Paragraphs A002, C051, C052, C053, C054, C055, C056, C059, C060, C061, C062, C074, C075, C076, C078, and C079
- Order 8400.10, volume 4, chapter 2, section 7, All Weather Operations
- Flight Standards Board (FSB) Report for specific aircraft

OPSPEC C057 - IFR TAKEOFF MINIMUMS, PART 135 OPERATIONS - ALL AIRPORTS. C057 is issued to all Part 135 operators who conduct IFR airplane operations. Only C057a and b will be printed for issuance when an operator is not authorized to use lower than standard takeoff minimums. C057a, b, and c will be printed for issuance when the operator is authorized to use takeoff minimums equal to the lowest straight-in landing minimums (14CFR section 135.225(h)). C057a, b, c, d, and e will be printed for issuance when the operator is authorized to use takeoff minimums lower than 1/2 mile or RVR 1800. C057d(4) will not be printed if the operator is restricted to operations only within the U.S. See AC 120-29, as amended, for information concerning requirements an oper-

ator must meet before being authorized to use lower than standard takeoff minimums. If an operator conducts operations under both Parts 121 and 135, C056 and C057 may need to be issued. For helicopter authorizations, see OpSpecs H106 and H116.

OPSPEC C058 - SPECIAL RESTRICTIONS FOR FOREIGN TERMINAL INSTRUMENT PROCEDURES. (FSAT 98-13 TO BE INCORPORATED). C058 is issued only when the POI (or region responsible for the geographic area where a foreign airport is located) finds it necessary to place special restrictions on a foreign terminal instrument procedure. These special restrictions to foreign terminal instrument procedures are applicable only to U.S. air carriers. The purpose of these special restrictions is to establish an equivalency between the foreign terminal instrument procedure and the International Civil Aviation Organization (ICAO) (PANS-OPS) or U.S. (TERPS) criteria. FAA Order 8260.31B, Foreign Terminal Instrument Procedures, provides direction and guidance on how to place restrictions on foreign instrument procedures. This order also contains a list of foreign terminal instrument procedures that are currently restricted. If an operator conducts flights to any airport listed in this order, the POI must issue C058 with the name of the airport, airport identification, procedure identification, and special restrictions listed in the appropriate template. For helicopter authorization, see OpSpec H107.

OPSPEC C059 - CATEGORY II INSTRUMENT APPROACH AND LANDING OPERATIONS. (HBAT 99-17 TO BE INCORPORATED)

A. CAT II operations are approved by issuance of OpSpec C059 to certificate holders/operators and MSPEC MC059 to program managers for Part 91K fractional ownership operations.

B. All initial CAT II operations for each operator/program manager and each airplane type used by that operator/program manager require Regional Flight Standards Division and AFS-400 review and concurrence before issuing OpSpec/MSPEC C059. Category II (CAT II) operations are evaluated for approval in accordance with the following:

(1) Advisory Circular (AC) 120-29 (as amended), "Criteria for Approval of Category I and Category II Weather Minima for Approach."

(2) Order 8400.10, volume 4, chapter 2, All-Weather Terminal Operations.

(3) An acceptable lower landing minima (LLM) maintenance program in accordance with Order 8300.10, Airworthiness Inspector's Handbook, volume 2, chapter 3,

in coordination with the principal avionics and maintenance inspectors.

(4) Concurrence of the Regional Flight Standards Division and AFS-400 is also required before amending OpSpec/MSpec C059 to include an airplane make/model/series new to the operator/program manager.

C. Detailed guidance for helicopter CAT II/III operations can be found in Order 8700.1, General Aviation Operations Inspector's Handbook, volume 2, chapter 59, Approve/Authorize Category I/Category II/Category III Operation.

D. In addition to the standard CAT II operations authorized by OpSpec/MSpec C059, nonstandard domestic CAT II operations can be authorized to qualifying runways that do not meet the performance or equipment requirements normally associated with a compliant CAT II operation (e.g., touchdown zone lighting (TDZ), centerline lighting (CL), or Approach Lighting System with Sequenced

Flashing Lights (ALSF)-1 & 2) by issuing the nonstandard OpSpec/MSpec C359. Specific guidance for this nonstandard VAT II authorization is found in:

(1) Order 8400.10, volume 3, chapter 1, section 5, Part C, OpSpec C359, Special Authorization for Certain Category II Operations at Specifically Approved Facilities, and

(2) Order 8400.13, Procedures for the Approval of Special Authorization Category II and Lowest Standard Category I Operations.

E. Each airplane type (make/model/series) used in CAT II operations must be listed in Table 1 of C059 and have an acceptable LLM maintenance program. The lowest decision height (DH) and lowest runway visual range (RVR) authorized for each airplane type must also be specified. The following example illustrates the method for authorizing each airplane in OpSpec/MSpec C059:

Table 1

CAT II Approach and Landing Minimums		
Airplane (Make/Model/Series)	DH Not less Than	Lowest Authorized RVR
<i>AIRBUS 300 A300B4103</i>	<i>100 Ft</i>	<i>1200</i>
<i>BOEING 727 217</i>	<i>100 Ft</i>	<i>1600</i>
<i>DOUG DC9 31</i>	<i>100 Ft</i>	<i>1600</i>
<i>DOUG DC9 32</i>	<i>100 Ft</i>	<i>1600</i>
<i>DOUG DC9 51</i>	<i>100 Ft</i>	<i>1600</i>
<i>DOUG DC9 81</i>	<i>100 Ft</i>	<i>1200</i>
<i>LKHEED 1011 385114</i>	<i>100 Ft</i>	<i>1200</i>
<i>BOEING 777-200</i>	<i>100 Ft</i>	<i>1000</i>

F. CAT II operations, with a decision height of 100 feet and RVR 1000 (300m) (lower than standard) may be authorized at certain foreign airports and domestic type III facilities when:

(1) An autoland approach or head-up guidance system (HGS) is used to touchdown;

(2) The airplane and its automatic flight control guidance system, or manually flown guidance system, are approved for approach and landing operations as specified by paragraph C060, C061, or C062 of these OpSpecs/MSpecs;

(3) The autopilot and approach coupler, or HGS system, is listed in the required CAT II airborne equipment (Table2) of this OpSpec;

(4) Equipment is flown in the HGS CAT III mode(s) of operation or autoland to touchdown, as appropriate;

(5) The flightcrew has been trained at the lower visibilities before they can be authorized. If the flightcrew is

currently authorized CAT III operations, no further training is required for this authorization in C059.

(6) The authorization for RVR 1000 is selected as subparagraph j in OpSpec/MSpec C059 and listed in Table 1 of OpSpec/MSpec C059.

(7) The notation of HGS CAT III mode(s) of operation or autoland, as appropriate, is listed in the "Additional Equipment and Special Provisions" column of Table 2.

G. The equipment required to conduct manually flown or automatically flown CAT II operations is specified in Table 2 of OpSpec/MSpec C059 for each airplane make/model/series. The equipment required is established in accordance with the applicable regulations, the approved Aircraft Flight Manual (AFM) (if applicable), and AC 120-29, as amended. There are two acceptable methods of demonstrating that an airplane is airworthy for CATII operations. These acceptable methods are "type design approval," obtained by a manufacturer or STC holder, or an "operational demonstration," conducted by an operator/program manager.

(1) *Type Design Approval.* The approved AFM (or flight manual supplement), for airplanes that have CAT II type design approval, contains a statement that the airborne systems have demonstrated the reliability and redundancy necessary for CAT II operations in accordance with AC 120-29 (or previous versions). Approved flight manuals also specify that certain equipment is required for airworthiness approval of the various kinds of CAT II operations. Some of the approved flight manuals also indicate that acceptable CAT II performance was demonstrated both with, and without, certain equipment (e.g., “autothrottles w/wo”). AC 120-29, as amended, also specifies that certain types of equipment are required for operational approval of the various kinds of CAT II operations (manual/autopilot). Therefore, both the approved AFM and AC 120-29, as amended, must be considered in determining if the additional equipment requirement must be listed (specified) in Table 2 of OpSpec/MSpec C059. The illustration below shows how the additional or required equipment should be listed in Table 2 of

OpSpec/MSpec C059.

(a) Equipment that is explicitly required by the airplane certification regulations (Title 14 of the Code of Federal Regulations (14 CFR) parts 23 and 25), the operating regulations (14 CFR parts 91, 91K, 121, 125, and 135) and/or the approved AFM **SHOULD NOT BE LISTED** in Table 2. The standard text of C059 requires this equipment to be functional. Therefore, the additional equipment or operational requirement that must be listed (specified) in OpSpec/MSpec C059 is determined by cross-checking the type of equipment required by AC 120-29, as amended, for the kinds of CAT II operations proposed, against the equipment required by regulations and the approved AFM.

i. The equipment listed in Table 2 of OpSpec/MSpec C059 as additional equipment is only that equipment required by AC 120-29, as amended, a Supplemental Type Certificate (STC), an Aircraft Flight Manual Supplement (AFMS), etc., and/or Order 8400.13, as applicable, for the kind(s) of CAT II operations to be authorized that is not explicitly required by regulations and/or the AFM. This would include equipment such as autoland for B-747 operations below RVR 1600.

ii. RVR 1000 authorization at certain foreign airports and domestic CAT III facilities must be noted in the listing (Table 2) of the additional equipment for CAT II and it must be noted in the remarks column of Table 2 that the equipment is to be flown in the autoland or HGS CAT III mode(s) of operation. Precision CAT II landing minimums are authorized only for autoland or HGS-equipped aircraft when operated by a properly qualified flightcrew and flown in the HGS CAT III mode(s) of operation. Additional guidance may be found in AC 120-29, as amended.

(b) When the AFM indicates acceptable performance both with and without (w/wo) certain items of

equipment (which are not explicitly required by AC 120-29, as amended), it must be determined how the operator/program manager intends to conduct CAT II operations and train flightcrews with those items of equipment. If the operator/program manager proposes to conduct operations both with and without certain items of equipment (such as autothrottle, autopilot), flightcrews must be trained for both situations and the item of equipment does not need to be listed in Table 2 of OpSpec/MSpec C059.

(2) *Equipment Eligibility that is Not Stated in the AFM, the AFMS, or the Flight Standardization Board (FSB) Report.* The operational demonstration method of demonstrating the airworthiness of CAT II equipment is only appropriate for airplanes and equipment that do not have CAT II type design approval. The operational demonstration must be conducted in accordance with AC 120-29, as amended. A part 121, 125, 129, 135 operator or a part 91K program manager should request that its Flight Standards District Office (FSDO) provide assistance in the eligibility assessment:

(a) The operator or program manager should provide the FSDO with the aircraft make, model and serial number, any evidence of instrument flight rules (IFR) approach approval, and pertinent information from flightcrew operating procedures.

(b) If the FSDO is unable to determine equipment eligibility from the approved documentation, it should forward the request and supporting data through its FAA Flight Standards Regional Division to the appropriate Aircraft Evaluation Group (AEG). The AEG will verify that the aircraft and its landing system meet the criteria for CAT II operations, and that the system can safely fly the CAT II approach procedures. The AEG will provide written documentation (e.g., amended FSB Report or other official documentation) to verify the eligibility of that equipment.

H. For CAT II authorization the operator or program manager must have an acceptable LLM maintenance program in accordance with Order 8300.10, volume 2, chapter 3. This LLM maintenance program should be coordinated with the principal airworthiness inspectors.

I. The kind of CAT II operation (manually-flown HGS and/or autopilot) must be specified for each item of equipment listed in Table 2 of OpSpec/MSpec C059. The following guidelines should be followed for filling out

Table 2:

- CAT II equipment required by the regulations or the approved AFM should **NOT** be listed.
- The required Airborne Equipment table combines the manual and autopilot columns into one column for programming purposes. Instead of putting an X under the appropriate column, the principal operations inspector (POI) will select the appropriate phrase, manual, or autopilot.

- If an item of equipment is applicable to a specific airplane's Make/Model/Series (M/M/S) for both manual and autopilot CAT II operations, both manual and autopilot can be highlighted and selected for insertion into the column.
- Please note the equipment required for RVR1000 CAT II authorization is to be listed in the "Additional Equipment" column.
- See the sample of Table 2 below for examples of how the items of equipment should be specified for the kind of CAT II operation.

EXAMPLE OF CAT II ITEMS OF EQUIPMENT

Table 2 (sample)

Kind of Category II Operation		
Airplane (Make/Model/Series)	Additional Equipment & Special Provisions	Manual (HGS)/Auto Pilot
Boeing 767 219	1. Approach coupler and FD must be operative	Auto Pilot
Boeing 757-232	1. An independent FD and display for each pilot (L and R or C and R)	Auto Pilot
Boeing 737-200	None-AFM guidance	Manual (HGS) or Auto Pilot
NIHON YSII A200	AFM Supplement dtd 3/26/2003	Auto Pilot

NOTE: The following equipment is required by the AFM and SHOULD NOT be listed in table 2 of

OpSpec C059:

- **One engine inoperative with flaps 20 degrees and manual throttle or 2 engines operative**
- **One Autopilot**
- **Two Electronic Attitude Director Indicators (EADI)**
- **Two Inertial Reference Units (IRU) in NAV mode**
- **Two sources of electrical power**

J. Authorized Airports and Runways. Airports and runways for which an operator is authorized to conduct CAT II instrument approach and landing operations are specified by Table 3 of OpSpec/MSpec C059.

(1) All foreign CAT II facilities approved for the program manager/operator's use must be listed in Table 3 of OpSpec/MSpec C059.

(2) If the airport and runways are approved for CAT II operations in part 97, they should not be routinely listed in Table 3 of OpSpec/MSpec C059 unless the POI deter-

mines there is a need to specify a special limitation for an operator at a particular airport.

(a) If the CAT II approach procedure is published in the National Aeronautical Charting Office Instrument Approach Procedures (IAP) flight information publication as a CAT II procedure, it is approved under part 97.

(b) The list of domestic- and foreign-approved CAT II/III facilities is based on Order 8400.8, Appendix 4, Procedures for Approval of Facilities for FAR Part 121 and Part 135 CAT III Operations, or the current version of Order 8400.13, Procedures for the Approval of Special Authorization Category II and Lowest Standard Category I Operations, can be found on the AFS-410 website.

(c) Once a facility has been approved, AFS-400 will put that facility on its Web site and notify the requesting air carrier, program manager, or their respective POIs of the approval.

(3) For RVR 1000 authorization, the foreign approved airports and runways for these operations must also be listed in Table 3.

(4) The following example of Table 3 illustrates a method for listing authorized airports and runways:

Table 3 (sample)

Airport Ident	Runways	Special Limitations
Mirabel, Canada	06	
Taipei - Chiang Kai Shek, Taiwan	056/23R	
Tokyo - Narita, Japan	16	

K. Note that in the “Operating Limitations” subparagraph, the crosswind component on the runway of intended landing was increased from 10 knots to 15 knots (or in accordance with the AFM, whichever is more restrictive).

L. Pilots-in-command (PIC) who have not met the requirements of section 91.1039(c), section 121.652, or section 135.225(d) as appropriate, shall use the high minimum pilot RVR landing minimum equivalents as determined from the table in OpSpec/MSpec C054. For the PIC to conduct the part 121 CAT II operations at the lower authorized minimums, he/she must have currently accumulated the hours required by section 121.652, in the aircraft type that he/she is going to be flying for that carrier. The provision of Air Transportation Association (ATA) exemption 5549 for part 121 air carriers may also apply.

M. Foreign lighting systems are accepted but may not be technically equivalent to Approach Lighting System with Sequenced Flashing Lights (ALSF).

N. For landing minimums not less than 1200 RVR, the touchdown zone sensor and the rollout sensor of an RVR system is required and must be used. The touchdown zone sensor RVR report is controlling for all operations and the rollout sensor RVR report provides advisory information to pilots. A mid-RVR sensor report, if available, provides advisory information to pilots and may be substituted for the rollout sensor RVR report if the rollout sensor RVR report is not available. Some RVR reporting systems contain four (4) sensors (e.g., touchdown zone, mid, rollout, and far end). In those cases, a far end sensor also provides advisory information to pilots and may be substituted for the rollout sensor RVR report if the rollout sensor RVR report is not available.

OPSPEC C060 - CATEGORY III INSTRUMENT APPROACH AND LANDING OPERATIONS. (HBAT 99-17 TO BE INCORPORATED). Category III (CAT III) operations are evaluated in accordance with the latest version of AC 120-28, Criteria for Approval of Category III Landing Weather Minima for Takeoff, Landing, and Rollout, and this handbook. See Order 8400.10, volume 4, chapter 3. CAT III operations are approved by issuance of C060. All initial CAT III operations for each operator and each airplane used by that operator require Regional Flight Standards Division and AFS-400 review and written concurrence, before issuing C060. This concurrence is also required before amending C060 to include an airplane make/model/series new to the operator. All reductions in CAT III operating minimums for each operator and aircraft also require Regional Flight Standards Division and AFS-400 concurrence.

A. Each airplane type (make/model/series) used in CAT III operations must be listed in subparagraph C060a and the Decision Height (DH)/Alert Height (AH) and lowest RVR

authorized for each airplane type must be specified for the kinds of CAT III operation authorized. CAT IIIa fail-passive operations must use a DH of 50 feet. Most CAT IIIa/IIIb fail-operational operations use an AH of 50 feet or 100 feet and use of a DH in conjunction with an AH for these operations is inappropriate. Sometimes, however, a DH is required for fail-operational CAT III (see AC 120-28). In these situations, a DH of 50 feet or less should be specified and use of an AH in these operations is inappropriate.

B. The equipment required to conduct CAT III operations is specified by subparagraph C060b for each airplane make/model/series. The equipment required is established in accordance with the applicable parts of 14CFR, the approved AFM, and AC 120-28 (as amended). The only acceptable method of demonstrating that an airplane is airworthy for CAT III operations is through type design approval obtained by a manufacturer. The approved AFM (or flight manual supplement), for airplanes which have CAT III type design approval, contains a statement to the effect that the airborne systems have demonstrated the reliability and redundancy necessary for CAT III operations in accordance with AC 120-28 (or previous versions). These approved flight manuals also specify that certain equipment is required for airworthiness approval of the various kinds of CAT III operations. Some of the approved flight manuals also indicate that acceptable CAT III performance was demonstrated both with, and without, certain equipment (for example “autothrottles w/wo”). AC 120-28 (as amended) also specifies that certain types of equipment are required for operational approval of the various kinds of CAT III operations. Therefore, both the approved AFM and AC 120-28 must be considered in determining the additional equipment which must be listed (specified) in C060b.

(1) Equipment which is explicitly required by the airplane certification regulations (Parts 23 and 25), the operating regulations (Parts 91, 121, 125, and 135), and/or the approved AFM should not be listed in C060b. The standard text of C060b requires this equipment to be functional. Therefore, the additional equipment which must be listed (specified) in C060b is determined by cross checking the types of equipment required by AC 120-28 for the kind(s) of CAT III operation proposed against the equipment required by the regulations and the approved AFM. The equipment to be listed in C060b as additional equipment is only that equipment which is not explicitly required by the regulations and/or the AFM, but is required by AC 120-28 and/or the guidance and direction in the AFS-400 concurrence letter for the kind(s) of CAT III operations to be authorized.

(2) When the AFM indicates acceptable performance both with, and without, (w/wo) certain items of equipment (which are not explicitly required by AC 120-28 or the AFS-400 concurrence letter) it must be determined how the operator intends to conduct CAT III operations and train flightcrews with those items of equipment. If the operator proposes to conduct operations both with, and without,

certain equipment (such as autothrottle), flightcrews must be trained for both situations and the item of equipment does not need to be listed in C060b. If the operator proposes to conduct operations only when those items of equipment (w/wo) are functional, then those items of equipment must be listed in C060b.

C. The kinds of CAT III operations (fail-passive and/or fail-operational) must be specified for each item of equipment listed in C060b for each airplane type. This is accomplished by placing an "X" in the appropriate column adjacent to each item of equipment. If an item of equipment is applicable to more than one kind of operation, Xs must be placed in appropriate columns. If an item of equipment is applicable to one kind of CAT III operation, but not the others, an X must be placed in the applicable column and the other columns for that item of equipment left blank. If only one kind of CAT III operation is authorized (for example, CAT III fail-operational), then the Xs must be placed in the CAT IIIa fail-operational column.

D. The runway field length required for the various kinds of CAT III operations must be specified in C060e for each airplane. The required field length for all CAT IIIa operations is 1.15 times the field length required by 14CFR §§ 121.195(b) or 135.385(b), as appropriate. The required field length for CAT IIIb operations is either 1.15 or 1.3 times the field length required by the previously cited regulations depending on the operational procedures and/or additional equipment used by the operator (see AC 120-28, as amended). Additional equipment such as autobrakes are required, if a field length factor of 1.15 is used in CAT IIIb operations below RVR 600 (a procedural means alone is not acceptable). Leave the appropriate items blank, if an operator is not authorized to conduct those kinds of CAT III operations with a particular airplane. For helicopter authorization, see OpSpec H109.

OPSPEC C061 - FLIGHT CONTROL GUIDANCE SYSTEMS FOR AUTOMATIC LANDING OPERATIONS OTHER THAN CATEGORIES II AND III. (HBAT 94-12 AND HBAT 99-17 TO BE INCORPORATED).

A. C061 authorizes an operator to use a flight control guidance system with automatic landing capabilities to touchdown. 14 CFR §§ 121.579(c) and 135.93(d) specify this type of operation must be authorized by OpSpecs. Before issuing C061, the POI must determine the following:

(1) The AFM permits use of the flight control guidance system (autoland system) to touchdown;

(2) Training on the use of the flight control guidance system and autoland procedures to touchdown is provided to flight crewmembers; and

(3) The operator continually maintains flight control guidance and autoland systems in accordance with an approved maintenance program for autoland operations.

B. The airplanes (make/model) and the flight control guidance systems (manufacturer/model) authorized for this type of operation must be listed in C061a.

C. AC 120-67, Criteria for Operational Approval of Auto Flight Guidance Systems, provides additional information.

OPSPEC C062 - MANUALLY FLOWN FLIGHT CONTROL GUIDANCE SYSTEM CERTIFIED FOR LANDING OPERATIONS OTHER THAN CATEGORY II AND III. (JAROPS BULLETIN.) (HBAT 99-17 TO BE INCORPORATED).

OPSPEC C063 - INSTRUMENT APPROACH OPERATIONS USING AN AREA NAVIGATION SYSTEM. (HBAT 95-03 TO BE INCORPORATED).

OPSPEC C064 - TERMINAL AREA IFR OPERATIONS IN CLASS G AIRSPACE AND AT AIRPORTS WITHOUT AN OPERATING CONTROL TOWER--NONSCHEDULED PASSENGER AND ALL-CARGO OPERATIONS. (HBAT 95-03 TO BE INCORPORATED). C064 authorizes an operator to conduct nonscheduled passenger and all-cargo (scheduled and nonscheduled) terminal area IFR operations in Class G airspace or into airports without an operating control tower, with the following limitations and provisions:

A. Before authorizing C064, the POI must determine that the operator has a method or procedure for obtaining and disseminating necessary operational information. This operational information must include the following:

(1) The airport is served by an authorized instrument approach procedure (and departure procedure when applicable);

(2) Applicable charts for crewmember use;

(3) Operational weather data from an approved source for control of flight movements and crewmember use;

(4) Status of airport services and facilities at the time of the operation; and

(5) Suitable means for pilots to obtain traffic advisories.

(6) *Sources of Traffic and Airport Advisories.*

B. Certificate holders may be authorized to use any two-way radio source of air traffic advisory information listed in

the AIM (for operations in U.S. airspace) or equivalent aeronautical information publications (for foreign operations).

(1) These sources include common traffic advisory frequencies, UNICOM, MULTICOM, and flight service stations.

(2) In those cases where two sources are listed at the same airport, inspectors must ensure the operator's manuals have procedures which require pilots to continuously monitor and use the traffic advisory frequency when operating within 10 nautical miles of the airport. The procedures should require communication concerning airport services and facilities to be completed while more than 10 miles from the airport.

(3) At some airports no public use frequencies may be available. In those cases, a certificate holder must arrange for radio communication of essential information including surveillance of local or transient aircraft operations by ground personnel. Ground personnel who operate a company radio for airport status and traffic advisory must be able to view airspace around the airport.

C. OpSpecs C064 and/or C080 may need to be issued to the certificate holder in order for the OpSpec C081, Special Non 14CFR Part 97 Instrument Approach or Departure Procedures, to be issued which authorizes the use of special (non-Part97) instrument approach or departure procedures.

D. C064 is applicable to Part 121, 125, 121/135, and 135 certificate holders. For helicopter authorization, see OpSpec H121.

OPSPEC C065 - POWERBACK OPERATIONS WITH AIRPLANES.

A. C065 authorizes the use of powerplant reversing systems for rearward taxi operations. Before issuing C065, the POI must determine whether the operator meets requirements discussed in AC 120-29, as amended. Airplane types (make/model/series) authorized for powerback operations must be listed in C065. Airports where powerback operations are authorized must also be listed. If the POI and/or operator determine that restrictions to powerback operations are required at certain gates or ramp areas, the restrictions must be described (adjacent to the airport name) in the "Restrictions and Limitations" column. OpSpecs worksheets provide a template for listing authorized airplanes, airports, and restrictions.

B. Section 121.133, 121.135, 135.21, and 134.23 require certificate holders to prepare manuals setting forth procedures and policies which must be used by ground and maintenance personnel in conducting their ground operations. Sufficient procedures must be established to maintain an adequate level of passenger and company ground personnel safety during ramp operations. Procedures should emphasize safety during boarding and deplaning of

passengers or cargo, specifically during times when an engine(s) may be running or a propeller(s) is turning during ground operations. Procedures should include, as a minimum, a means for defining no-access areas around the propeller(s) as well as the landing gear and tugs during push and ground marshaling operations. Policies should provide that an adequate number of ground personnel are assigned to ensure safety of company personnel and passengers.

C. Procedures for pushback and ground marshaling activities should be clearly defined and should include safety precautions and signals, and should ensure adequate visibility of assigned personnel during the time of aircraft movement.

D. FAA air carrier surveillance programs should emphasize increased awareness by inspectors and the strict need to follow safety procedures around turning propellers, in marshalling and pushback procedures, and/or other ground activities.

E. Additional references can be found in NTSB Recommendations 91-297, 91-298, and 93-146, and ACOB 8-94-2, Safety in Ground Operations.

OPSPEC C066 - TURBOJET AIRPLANE TAKEOFF OPERATIONS IN TAILWIND CONDITIONS.

A. C066 authorizes the operator to conduct turbojet airplane takeoff operations in tailwind conditions. There are two options for C066. The first option authorizes tailwind operations for tailwind conditions not exceeding 10 knots. The second option authorizes tailwind operations for tailwind conditions not exceeding 15 knots. When the second option is issued, a table is provided for operator specific information to be entered when an operator is given a special authorization in accordance with C066b.

B. Option 1 may be issued to operators who operate turbojet airplanes that have FAA-approved AFMs that contain an authorization for operating with tailwind components of 10 knots. The operator must conduct its tailwind operations in accordance with the operating procedures and performance for limitations specified in the FAA-approved AFM.

C. Option 2 may be issued to operators who operate turbojet airplanes that have FAA approved AFMs that contain an authorization for operating with tailwind components of 15 knots. The operator must conduct its tailwind operations in accordance with the operating procedures and performance limitations specified in the FAA-approved AFM and in accordance with the requirements of C066a, including the additional field length requirements of C066a(2)(c). If a special authorization in accordance with C066b is issued, airport identification, runway, airplane make/model/series, and special conditions and limitations information must be entered into the table. If a special authorization is not issued, the words "NOT

AUTHORIZED” should be entered into the table. Before issuing C066 Option 2, POIs should contact AFS-400 for additional guidance and information. Additional information concerning turbojet airplane takeoff operations in tailwind conditions may be found in volume 4, chapter 3 (TBD).

OPSPEC C067 - SPECIAL AIRPORT AUTHORIZATIONS, PROVISIONS, AND LIMITATIONS.

A. General. OpSpec C067 provides for authorizing an operator to conduct operations into certain special airports.

(1) For 14 CFR part 121 operators, provides for authorization to use uncertificated civil land airports and uncertificated military airports.

(2) For Part 121 and Part 135 operators, it provides for authorization to use other airports that because of operational considerations, require special authorization to operate at those airports.

(3) For part 135 operators, C067 provides for authorizing certain transport category airplanes a deviation to 14 CFR section 135.367(a)(3) or section 135.379(d).

(4) For all operators, C067 provides for approval of operations at an airport with unpaved runways.

(5) The POI must use OpSpec C050 for “special PIC qualification airports” authorization described 14 CFR Section 121.445. An airport on the Special PIC Qualification Airport list might be entered in C067 if the airport has special requirements beyond the PIC qualification requirements of 14 CFR section 121.445 (such as required special aircraft performance charts and equipment, required special lighting for airports such as flare pots, or required special navigation and communications equipment).

(6) OpSpec C081 should be used for listing the airports/runways where AFS-400 has approved specific “Special” instrument procedures for that certificate holder.

B. Uncertificated U.S. Civil Airports. In accordance with CFR Section 121.590(a), a certificate holder may be authorized to conduct operations into an airport that is not certificated in accordance with 14 CFR Part 139. It should be noted that Part 139 is applicable to only land airports located within the U.S. Foreign airports are not certificated in accordance with Part 139.

(1) This authorization is restricted to all-cargo airplanes and airplanes having a seating capacity of 30 or fewer passenger seats.

(2) Airplanes that have more than 30 passenger seats may not be authorized to operate into uncertificated

airports since doing so would result in the airport operator being in noncompliance with Part 139.

(3) To authorize the certificate holder to conduct operations into an uncertificated U.S. civil airport, enter the location/identifier in Table 1.

(4) Special provisions and limitations may also be entered for each airport authorized.

(5) If this authorization is not applicable, enter N/A into both cells of Table 1.

C. Uncertificated Military Airports. In accordance with CFR Section 121.590(a), a certificate holder may be authorized to conduct passenger and all-cargo operations into a military airport that is not certificated in accordance with Part 139.

(1) Operations into uncertificated military airports are restricted to those that are conducted pursuant to an exclusive contract with the Department of Defense (DOD).

(2) Passengers and/or cargo not being transported in accordance with the provisions of an exclusive contract with the DOD may not be carried in an airplane serving an uncertificated military airport.

(3) These operations, because of exclusive DOD contract requirements, are not subject to the 30 passenger seat restriction as in the case of other uncertificated U.S. civil airports.

(4) 4. If Uncertificated Military Airports are authorized, select the following statement in the OPSS for insertion into this OpSpec as subparagraph c:

“c. Uncertificated Military Airports. The certificate holder is authorized to conduct passenger and all-cargo operations into active military airfields that are not certificated under 14 CFR part 139 provided such operations are conducted pursuant to a contract exclusively with the Department of Defense.”

D. Other Special Airports. Other special airports include those that may require special operational considerations and special flight crewmember training. These include airports with special runway markings, such as flare pots or trees; high altitude airports with special airplane performance requirements; airports in or near precipitous terrain (Section 135.363(h)); and airports with unpaved runways or runways constructed on frozen lakes and rivers. (see guidance in Order 8400.10, volume 4, chapter 3, section 5, Selected Practices, paragraph 1029.)

(1) Special Airport authorization for conducting operations at airports in Alaska.

For authorization to conduct airplane operations using the Reginald Bennett International (RBI) Runway Reflectorization System in Alaska:

(a) The air carrier must provide a station agent at the airport trained to give wind information and runway conditions (e.g., snow depth or ice present, etc.) to the flightcrew and

(b) Train its flightcrews on this specific system in accordance with an approved training program. The training program must be approved in accordance with the following criteria:

i. Each pilot must receive initial and recurrent training in accordance with their company approved training program.

ii. Initial training must be completed by each person (both ground and flight personnel) prior to their participation with this authorization.

iii. Recurrent training must be completed within each subsequent 12 calendar months.

iv. Whenever a person who is required to take this recurrent training completes the training in the calendar month before or the calendar month after the month in which this recurrent training is required, that person is considered to have completed it in the calendar month in which it was required.

(c) An example below shows how to provide authorization for conducting operations after curfew hours at specific airports or use of the RBI Runway Reflectorization system at specific airports in Table 2 of OpSpec C067.

(2) Unpaved runways for turbojet operations. An airport with unpaved runways is required to have special operational procedures and flight crewmember training. For approval of operations at an airport with unpaved runways the POI must identify the airport and reference the appropriate section of the operator's manuals in Table 2 of OpSpec C067. See 8400.10, volume 4, chapter 3, section 5, Selected Practices.

(3) For Flag or Supplemental destination airports that do not have an available alternate in accordance with 14 CFR Section 121.621(a)(2) or 121.623(b) that are dispatched in accordance with the required fuel reserves set forth in 14 CFR Section 121.641(b) or 121.645(c) as applicable, may be listed along with any special provisions or limitations.

(4) Even though it is not encouraged to include aircraft limitations at certain airports during curfew hours in the OpSpec paragraphs, Table 2 of OpSpec C067 may be used if it is required by an airport authority to be in a carrier's OpSpecs. A sample of Table 2 below shows an example of limitations for air carrier operations into specific special airports during curfew hours.

Sample of Table 2

Special Airport Location/Identifier	Special Provisions and Limitations and Special Flight Crewmember Training
PKEK, Ekwok, Alaska	A station agent is required to give wind information to the flightcrews and the flightcrew must have completed the required approved training on the RBI Runway Reflectorization System
DCA, Ronald Reagan Washington National Airport	Limitations during the curfew hours Boeing 737-800—Max Takeoff - 159,000 pounds Max Landing - 137, 600 pounds
Tahiti Island, Society IS; PPT/NTAA	Approved as destination airport without an available alternate.

(5) Deviation from Requirement to Obtain Obstacle Clearance Data for Takeoff. This paragraph provides for the authorization of certain transport category airplanes a deviation to 14CFR section 135.367(a)(3) or section 135.379(d). Guidance for this deviation authorization is contained in Order 8400.10, volume 4, Chapter 3, Section 5, subparagraph B. To authorize this deviation, it must be listed in OpSpec A005 and the following statement must be selected in C067.

"The certificate holder is authorized to conduct takeoff operations using transport cate-

gory airplanes weighing no more than 19,000 pounds and having a seating configuration of no more than 19 passenger seats without showing compliance with CFR sections 135.367(a)(3) and 135.379(d). This authorization is limited to only the following operations conducted:

- *At airports of 4,000 feet MSL or less field elevation*
- *On runways on which the available length of runway is equal to or greater*

than 150 percent of the runway required by CFR sections 135.367(a)(1) and (2) or CFR section 135.379(c), as applicable

- *In weather conditions equal to or greater than straight-in Category I landing minimums for the runway being used.*

OPSPEC C068 - NOISE ABATEMENT DEPARTURE PROFILES (NADP) ITEM 7K. (HBAT 93-10 TO BE INCORPORATED).

A. C068 authorizes an operator to conduct NADPs using aircraft with a maximum certificated gross takeoff weight of more than 75,000 pounds. Operators may use either or both of two standard NADPs as described in AC 91-53, Noise Abatement Departure Profiles, as amended. Checklist item 7k is used to generate OpSpecs paragraphs A004(a), C068, and a new table of contents.

B. Before authorizing this paragraph, the POI must ensure that all airplane vertical departure profiles described in the certificate holder operations and/or training manuals comply with the minimum criteria established in AC 91-53 for NADPs (Close-In and Distant) before approving paragraph C068 for the certificate holder's OpSpecs. The certificate holder shall not use any other departure profile (except as stated in 14 CFR Part 91) that is not defined within the AC.

NOTE: Use of 14 CFR Part 91 procedures does not require OpSpecs authorization. If the operator does not meet the criteria established in AC 91-53, then item 7k will not be checked and C068 will not be issued.

C. Proposed exceptions to the criteria as stated in this OpSpec which would be less limiting (less than 800 feet above field elevation (AFE)) must be addressed by the certificate holder to the certificate holder's POI for concurrence by AFS-400 of the Flight Standards Service.

D. AC 91-53, effective July 22, 1993, established minimum acceptable criteria for speed, thrust settings, airplane configurations and the criteria for both the Close-In and Distant NADPs. These NADPs can be combined with preferential runway selection and flight path techniques to minimize noise impact. For helicopter information, see AC 91-66, Noise Abatement for Helicopters.

NOTE: The Distant departure profiles requires an initiation of flaps/slats retraction prior to thrust cutback initiation with the thrust cutback initiation at an altitude of no less than 800 feet AFE. Configuration changes necessary to meet regulatory performance or operations requirements shall not be affected by this procedure. For those airplanes that have a performance requirement to reduce takeoff

flaps to an intermediate takeoff flap setting at 400 feet AFE or above, the next flap/slats retraction should be initiated at an altitude of no less than 800 feet AFE.

OPSPEC C069 - TURBOJET AIRPLANE TAKEOFF OPERATIONS IN TAILWIND CONDITIONS NOT TO EXCEED 10 KNOTS. (SPLIT FROM C066).

OPSPEC C070 - AIRPORTS AUTHORIZED FOR SCHEDULED OPERATIONS. (GUIDANCE TO BE UPDATED).

A. Under 14 CFR Part 119.49, the OpSpecs must prescribe the authorizations and limitations for each type of operation. All regular airports shall be listed in the OpSpecs of all operators conducting scheduled operations. This includes domestic operations, flag operations, and commuter operations. Provisional and refueling airports shall be listed for 14 CFR Part 121 domestic and flag operations:

- Airport name
- Three letter identifier of the airport
- Airplanes authorized to use the airport
- A notation as to whether the airport is regular (R), refueling (F), or provisional (P) for each type of airplane authorized (refueling and provisional airports are not applicable to Part 135 operators).

NOTE: If an airport is designated as provisional, the regular airport or airports for which it serves as a provisional airport must be annotated. (Except in unique situations, an airport should not be designated as a provisional airport if it is located more than 100 statute miles outside of the metropolitan area served by the regular airport.)

B. If the operator provides a list of airports to be incorporated into C070, this list must provide the same type of information discussed in subparagraph A. This list must be annotated with the effective date of the listing.

C. C070 specifies that the operator must maintain a list of alternate airports which can be used. This list of alternates may be integrated into the list provided by the operator, if desired. The POI should occasionally inspect the list of alternates to determine airport and airplane compatibility.

OPSPEC C071 - AUTOPILOT ENGAGEMENT AFTER TAKEOFF AND DURING INITIAL CLIMB FOR AUTO FLIGHT GUIDANCE SYSTEM (AFGS). (HBAT 98-32 TO BE INCORPORATED).

OPSPEC C072 - ENGINE-OUT DEPARTURE PROCEDURES WITH APPROVED TEN-MINUTE TAKEOFF THRUST TIME LIMITS. (FSAT 95-17 TO

BE INCORPORATED).

OPSPEC C073 - IFR APPROACH PROCEDURES USING VERTICAL NAVIGATION (VNAV). (HBAT 99-08 TO BE INCORPORATED).

OPSPEC C074 - STRAIGHT-IN CATEGORY I PRECISION APPROACH PROCEDURES AND IFR LANDING MINIMUMS-ALL AIRPORTS. (SPLIT FROM C053). C074 authorizes the lowest straight-in Category (CAT) I precision approach procedures and IFR landing minimums. These precision approaches are also referred to as Category I, ILS, MLS, or GLS (GPS landing system) approach procedures.

A. The visibility requirement for MALS and SALS approach light configurations was changed from 3/4 statute mile and 4000 RVR to 5/8 statute mile and 3000 RVR to allow credit for a full lighting system. Also Note 1 regarding requirements for a full ILS was removed, as this information is covered in other FAA publications. Credit is given for autoland in subparagraph b.

B. In subparagraph d, "Limitations and Provisions for Instrument Approach Procedures at Foreign Airports" precision approaches are now referred to as "ILS, MLS, or GLS" and reference is made to the Joint Aviation Authorities (JAR-OPS-1).

C. C074 expands the approved equipment list to include the use of flight directors (FD) by authorized operators flying "Special Aircrew and Aircraft Certification Required" (special CAT I) minimums. CAT I approach charts may depict two blocks of minimums: the standard and the "Special Aircrew and Aircraft Certification Required" minimums. At selected locations, POIs should allow authorized operators to use the special minimums, provided an approved autopilot with automatic tracking capability (approach couple), and approved heads-up guidance system (HGS), or FD, approved for CAT I operations, is used on the approach.

(1) *FAA Approval.* Both air carrier and private operators may continue to use the standard CAT I minimums without alteration of current authorizations or procedures; however, operators must obtain FAA approval to use the special CAT I minimums. To obtain this approval, field offices will issue authorizations to general aviation operators by using FAA Form 7711-1, "Certificate of Waiver or Authorization," and to air carrier operators by issuing operations specifications.

(2) *Conditions of Approval.* Before issuing an authorization to use special CAT I minimums, inspectors shall ensure that each operator meets the following conditions:

(a) *Aircraft and Associated Aircraft Systems.*

The authorized aircraft must be equipped with an approved autopilot approach coupler, HGS, or FD system that provides guidance to decision height (DH). Inspectors must establish that the approach coupler, HGS, or FD are certified for use down to an altitude of 200 feet above ground level (AGL) or lower.

(b) *Flightcrew Procedures.* The Pilot-in-Command (PIC) must use the automatic flight control guidance system (AFCGS), HGS, or FD to DH or to the initiation of a missed approach, unless visual references with the runway environment are established, thus allowing safe continuation to a landing. If the AFCGS, HGS, or FD malfunctions or becomes disconnected, the PIC may not descend below standard minimums unless the runway environment is in sight.

(c) *Flightcrew Qualification.* PICs must have demonstrated proficiency using the AFCGS, HGS, or FD (as appropriate) on the most recent instrument proficiency check required in volume 4, chapter 2, section 5, paragraph 583B; and 14 CFR §§ 121.441; 135.297; 125.291; 61.57(e)(2); or 61.58 (as applicable).

D. For helicopter authorization, see OpSpec H117.

OPSPEC C075 - CAT I IFR LANDING MINIMUMS-CIRCLING APPROACHES. (SPLIT FROM C053).

A. OpSpec paragraph C075 is issued to operators who conduct 14CFR Part 121, 135, and 125 operations with fixed-wing airplanes. OpSpec C075 specifies the lowest minimums which can be used for Category I circling approach maneuvers. It also provides special limitations and provisions for instrument approach procedures at foreign airports. See volume 4, chapter 2 for more information on required training for circling maneuvers.

B. For the purpose of this OpSpec authorization, any operator issued this paragraph is authorized to conduct circle-to-land maneuvers. In any weather condition, a certificate holder that permits its pilots to accept a "circle to land" or a "circle to runway (runway number)" clearance from ATC conducts circle-to-land maneuvers. The term "circle-to-land maneuver" includes the maneuver that is referenced in various regulations, publications, and documents as "circle-to-land maneuver," "circling," "circling maneuver," "circle," "circling approach," and "circling approach maneuver." With regard to pilots, "conducting" a circle-to-land maneuver means to act as the pilot flying when a circle-to-land maneuver is being conducted.

C. Aircraft operating under IFR during all circle-to-land maneuvers are required to remain clear of clouds. If visual reference to the airport is lost while conducting a circle-to-land maneuver the missed approach procedure specified for the applicable instrument approach must be followed, unless

an alternate missed approach procedure is specified by ATC.

D. Each certificate holder who is issued OpSpec C075, and who is also required to have maneuver descriptions/procedures, must publish in its training manual, or must incorporate in its training manual by reference to another approved manual, a detailed description of the procedures used to conduct a circle-to-land maneuver. Pilots must conduct circle-to-land maneuvers using those procedures.

E. Part 121 certificate holders may conduct circle-to-land maneuvers under two separate provisions contained within OpSpec C075.

(1) *With flight training and flight checking.* Part 121 certificate holders whose pilots have been trained and checked for the circling maneuver in accordance with 14CFR Part 121, Appendix E and Appendix F, or in accordance with an Advanced Qualification Program (AQP), may conduct a circle-to-land maneuver:

- at the published circling landing minimums for the instrument approach to be used; or
- at the minimums specified in the chart contained within the OpSpec paragraph, whichever is higher.

(a) Appendix E does not require a Part 121 certificate holder to train a second-in-command (SIC) in the circling maneuver if the certificate holder prohibits the SIC from performing/conducting (acting as pilot-flying) a circling maneuver. However, an SIC must be trained and can be checked in those functions specific to the circle-to-land maneuver that the SIC is required to perform while acting as pilot-not-flying.

(b) Any pilot who possesses a pilot certificate restricting circling approaches to VMC conditions is not eligible to conduct circle-to-land maneuvers except as provided in paragraph E.

(2) *Part 121 operations without flight training and flight checking.* Certificate holders conducting circle-to-land maneuvers without training and checking must use a Minimum Descent Altitude (MDA) of 1,000 feet (HAA) or the MDA of the published circling landing minimums for the instrument approach to be used, whichever is higher. Certificate holders that conduct a circle-to-land maneuver under this provision remain under an IFR clearance and must comply with those procedures otherwise required for circle-to-land maneuvers. Certificate holders must ensure pilots are familiar with those procedures. Part 121 pilots who have NOT been trained and checked for the circling maneuver in accordance with 14 CFR Part 121, Appendices E and F, or in accordance with an Advanced Qualification Program (AQP), may conduct a circle-to-land maneuver when:

- the reported ceiling is at least 1,000 feet and the visibility is at least 3 statute miles (See Part 121, Appendix E and Appendix F);

OR

- the reported weather is at least equal to the published circling landing minimums for the instrument approach to be used, whichever is higher.

F. Part 125 certificate holders are not permitted to conduct circle-to-land maneuvers in airplanes without their pilots having been checked in that maneuver.

(1) *Section 125.291 Pilot-in-Command (PIC).* Instrument proficiency check requirements, as required in subsection (c), are: “The instrument approach procedure or procedures must include at least one straight-in approach, one circling approach, and one missed approach. Each type of approach procedure demonstrated must be conducted to published minimums for that procedure.”

(2) *Required Part 125 SIC.* The SIC must complete the annual competency check required by section 125.287. The circle-to-land maneuver is not part of the section 125.287 competency check. However, each SIC is evaluated for flightcrew coordination.

(3) *Pilot-not-flying duties.* Each crew member can be checked in those functions specific to the circle-to-land maneuver that the pilot is required to perform while acting as pilot-not-flying.

G. Part 135 certificate holders are not permitted to conduct circle-to-land maneuvers in aircraft without their pilots having been checked in that maneuver. (Helicopter IFR circle-to-land maneuvers are authorized in OpSpec H118.)

(1) *Section 135.297 Pilot-in-Command instrument proficiency check requirements.*

(a) Section 135.297(a) does not allow “any person to serve, as pilot-in-command of an *aircraft* [emphasis added] under IFR unless, since the beginning of the 6th calendar month before that service, that pilot has passed an instrument proficiency check under this section....”

(b) Section 135.297(b) requires, “The instrument approach procedure or procedures must include at least one straight-in approach, one circling approach, and one missed approach. Each type of approach procedure demonstrated must be conducted to published minimums for that procedure.” The requirement to demonstrate a circle-to-land maneuver is applicable to both airplanes and helicopters.

(c) Part 135 single-pilot and single PIC operators are not required to have training programs. However, the circle-to-land maneuver must be successfully demonstrated in every section 135.297 instrument proficiency check.

(2) In accordance with section 135.293, a Part 135 IFR operator is required to ensure that each IFR SIC has an annual competency check. In accordance with Order 8400.10, Vol. III, Paragraph 539, a SIC need not be evaluated in “circling approaches” when an operator’s procedures restrict an SIC from conducting (acting as pilot-flying) this event in revenue service. However, each required IFR SIC is evaluated for flightcrew coordination.

(3) *Pilot-not-flying duties.* Each pilot must be trained and can be checked in those functions specific to the circle-to-land maneuver that the pilot is required to perform while acting as pilot-not-flying.

(4) The standard of competence for Part 135 instrument proficiency checks is specified in section 135.293(d). This standard is also specified in the Airline Transport Pilot Practical Test Standard (FAA-S-8081-5) and the Instrument Rating Practical Test Standard (FAA-S-8081-4).

H. For helicopter authorization, see OpSpec H118.

OPSPEC C076 - CAT I IFR LANDING MINIMUMS-CONTACT APPROACHES. (SPLIT FROM C053). The certificate holder shall not use any IFR Category I landing minimum lower than that prescribed by the applicable published instrument approach procedure. The IFR landing minimums prescribed in paragraphs C053 for *nonprecision* “other than ILS, MLS, or GLS” approaches and C074 for *precision* “ILS, MLS, or GLS” approaches of these operations specifications are the lowest Category I minimums authorized for use at any airport. Those paragraphs must also be issued, as applicable. For helicopter authorization, see OpSpec H119.

OPSPEC C077 - TERMINAL FLIGHT RULES LIMITATIONS AND PROVISIONS. (FORMERLY OPSPEC B033). OpSpecs paragraph C077 is issued to all 14 CFR Part 135 on-demand turbojet certificate holders, all 14 CFR Part 121 certificate holders, and Part 129 foreign operators. OpSpec paragraph B051 “Part 121 En Route Visual Flight Rules, Limitations, and Provisions,” is applicable for Parts 121 and 129 VFR en route operations for propeller-driven aircraft and may be issued in conjunction with C077.

A. C077 provides for operations under a Charted Visual Flight Procedure (CVFP) unless operating under the provisions of 14 CFR Part 93, SFAR 50-2, or SFAR 71, if the minimums in the CVFP are lower than those listed in section 121.649, section 121.649 prevails for all Part 121 operators, conversely for Part 135 operations in class G airspace, section 135.205 prevails. There are no provisions in Section 121.649 or 135.205 for a deviation. An exemption is required if the certificate holder wants to use a CVFP with lower than standard minimums. For Part 129 operators, the applicable provisions and limitations of

Part 91 prevails.

B. The VFR weather conditions specified in 14 CFR section 91.155 may be used. However, where section 91.155(c) and (d) refers to section 91.157, “Special VFR Minimums,” the minimums set forth in section 121.649 or section 135.205, as applicable, take precedence for the Part 121 and 135 certificate holders.

C. *Subparagraph b(2)(b).* Uncontrolled airports can be in either controlled or uncontrolled airspace. As long as the provisions listed in this subparagraph are met, the certificate holder may operate VFR in uncontrolled airspace in the terminal area in accordance with this OpSpec. For the purpose of direct communication at uncontrolled airports, a Common Traffic Advisory Frequency (CTAF) may be utilized as long as it is associated with an air/ground communication facility. The CTAF may be a UNICOM, MULTICOM, FSS, or a tower frequency. Acceptable air/ground communication is a demonstrated reliable means to directly relay traffic advisories and information that is pertinent to conditions on and around the landing surface during the terminal phase of flight. For example: if the certificate holder adequately demonstrates to the POI its reliability to relay essential information, via radio or another type of communication, through an agent located near the landing surface, it is considered to be a “demonstrated reliable means” of communication.

D. *Subparagraph b(3).* In lieu of a CVFP, an approved charted visual procedure is highly recommended for all terminal VFR departures/arrivals that fall under this Operations Specification. The POI may approve that procedure. The proximity of obstacles to the departure flight path, the seeing conditions, the accuracy of the guidance and control systems, the pilot’s proficiency, and the certificate holder’s training, should determine the size of the area in which obstacle clearance or avoidance must be considered. The POI should take into account the airplane performance data annotated in FAA Order 8400.10, Air Transportation Operations Inspector’s Handbook, Volume 4, Chapter 3.

E. Where there is an operating ATC facility and it is possible to obtain an IFR clearance, the flight must depart on an IFR flight plan, even if authorized en route VFR under B051.

(1) It is recognized that the IFR infrastructure at certain locations may not always support an expeditious departure environment. If the certificate holder is able to show that it is just as safe to depart on a VFR flight plan at certain IFR airports, they may apply for a nonstandard OpSpec prescribing VFR departure procedures for that airport. For procedures to apply for a nonstandard OpSpec authorization, see Volume 3, Chapter 1, Section 2.

(2) *Subparagraph c(4).* The requirement to obtain an IFR clearance no farther than 50 nautical miles still is valid. However, it is recognized that this procedure may not

be practical in all situations. If a greater distance is necessary, the certificate holder may apply for a nonstandard paragraph

(3) OpSpec paragraph B051 is for Part 121 and 129 VFR en route operations for propeller-driven aircraft. Paragraph B052 is for certain VFR operations in remote areas. If operating under those paragraphs, certain en route VFR provisions in Part 93, SFAR 50-2, or SFAR 71, the flightcrew may depart VFR under the provision of C077c., except the requirement to obtain an IFR clearance en route does not apply.

F. Terminal Departure IFR Requirements in subparagraph d. It is acceptable if ATC clears the flight to execute a VMC takeoff and climb to a specified point in the clearance as part of an IFR clearance. However, the certificate holder must ensure that the obstacle performance requirements are met. Further, the flight must not depart on a VFR flight plan if the capability to go on an IFR flight plan is evident.

G. Subparagraph e provides special limitations and provisions for all VFR operations. This subparagraph is applicable to all the provisions and limitations of C077.

(1) *Subparagraph e(1).* In order for the certificate holder or operator to conduct VFR operations under C077, they must have in place either a procedure or program which can identify obstacles and the airport obstacle data. Further, they must ensure use of that information by the flightcrew.

(2) *Subparagraph e(2).* Although each subparagraph has specific details and minimums regarding VFR, the requirements for sufficient seeing conditions to identify and avoid obstacles is required for all VFR operations.

H. For Alaska Operations. A nonstandard subparagraph (C077f) for certain intrastate Alaskan operations was added. The certificate holder may operate under that nonstandard paragraph provided they qualify under the following requirements. If the certificate holder does not qualify, they will not be issued subparagraph f.

(1) In view of Public Law 104-264, section 1205, and in accordance with section 121.657(a), a deviation was granted from the minimums set forth in section 121.657(b).

(2) That deviation applied only to certificate holders that “transitioned” from Part 135 to Part 121 by March 20, 1997, and only for those operations conducted SOLELY within the state of Alaska (intrastate). Operations specification paragraph C077, subparagraph f, describes the provisions for that deviation, and is controlling.

(3) If a “transitioned” certificate holder applied the above deviation to its operations, paragraph A005 “Exemp-

tions and Deviations” of its OpSpec must reference that deviation for authorization.

OPSPEC C078 - IFR LOWER THAN STANDARD TAKEOFF MINIMUMS, 14 CFR PART 121 AIRPLANE OPERATIONS - ALL AIRPORTS.

A. C078 allows for takeoff visibility with the following exceptions:

- Takeoff operations without runway centerline lighting not less than RVR 1000; and
- Takeoff operations using visual references not less than RVR 500.
- Two new subparagraphs added for the authorization of takeoff with lower than standard takeoff minimums using takeoff guidance systems.
- Further, a new subparagraph was added which contains provisions for pilot assessment of touchdown zone (TDZ) RVR for takeoff when the installed RVR is inoperative.

B. In subparagraph b(2) the touchdown zone RVR 1200 or RVR 1000 authorization can be selected, as applicable. Either the touchdown, mid, and rollout RVR 600 or touchdown zone RVR 500, mid RVR 500, and rollout RVR 500 can be selected for authorization.

(1) Air carriers currently authorized RVR 600 may be approved for RVR 500 operations when changes reflecting RVR600 have been incorporated into the approved training program. (*Training program not required in Part 125.*) No additional flightcrew qualification, by a check airman or qualified FAA inspector, is required to fly to these reduced minimums provided current flightcrew qualification for lower than standard minimums for takeoff operations utilizes RVR 500 or lower. Both pilots of a two-pilot flightcrew must be qualified for takeoffs using RVR 500 before a flightcrew may conduct such takeoffs. Individual pilots must be trained (Part 121) and checked (Parts 121 and 125) in takeoffs using RVR 500, or lower, before conducting such takeoffs. Pilot qualification must include a flight check including at least one takeoff during each pilot’s recurrent qualification cycle in a flight simulator capable of replicating takeoff visibility of RVR500; and the simulator must be set at RVR 500, or lower, during such takeoffs. (Additional pilot qualification involving a check airman or a qualified FAA inspector is not required.)

(2) Operations below RVR 600 at U.S. airports require appropriate surface movement and guidance control procedures to be in place at the airport.

C. The authorized take off minimums changed from touchdown, mid, and rollout RVR 175 meters to a reported touchdown zone RVR of 150 meters, mid RVR of 150meters, and rollout RVR of 150 meters.

D. Pilot Assessment of IFR Lower Than Standard

Takeoff Minimums. Subparagraph c allows for pilots to make an assessment of RVR when the TDZ RVR is inoperative, is not reported, or the pilot determines that reported TDZ RVR is in error. This assessment, when equal to or greater than that required in the TDZ report for takeoffs made with only outside visual references, or for takeoffs using takeoff guidance systems, can be used for takeoff when the Mid and Rollout reports are available, and are equal to or greater than that required. To take advantage of this possibility, each certificate holder must:

(1) For each runway for which the assessment is allowed, have an FAA-approved procedure for assessing RVR that includes identification of an appropriate number and type of runway lights or markings of known spacing which must be visible to the pilot when viewed from the flight deck with the aircraft in the take-off position. This procedure must include variability of runway light intensity settings and ambient lighting (day or night).

(2) For each runway for which the assessment is allowed, have an FAA-approved procedure for describing the actions to be taken when local visibility conditions, as determined by the pilot, indicate that a significantly different visibility exists from that reported for the TDZ.

(3) For each runway for which the assessment is allowed, have an FAA-approved procedure for coordinating release with ATC and Dispatch.

(4) FAA-approved procedures for RVR assessment, for determining that TDZ RVR reports are in error, and for takeoff and flight release in operating manuals and in such materials which are readily available to the flightcrew in the cockpit.

(5) An FAA-approved training and validation program of the FAA-approved procedures for all flightcrews authorized to participate. Validation of the procedures will be accomplished in an FAA-qualified and approved flight simulator. No flight crewmember may participate in these operations until this portion of the approved training program is accomplished satisfactorily.

E. Subparagraph c provides for the authorization for lower than standard take off minimums using takeoff guidance systems with certain limitations and provisions. Although RVR 500 is the lowest authorized RVR when the takeoff is based upon outside visual references, RVR 300 is the lowest authorized RVR when using a takeoff guidance system.

OPSPEC C079 - IFR LOWER THAN STANDARD TAKEOFF MINIMUMS, 14 CFR PART 135 AIRPLANE OPERATIONS - ALL AIRPORTS-JAROPS BULLETIN. (HBAT 98-24A AND HBAT 99-17 TO BE INCORPORATED).

OPSPEC C080 - TERMINAL AREA IFR

OPERATIONS IN CLASS G AIRSPACE AND AT AIRPORTS WITHOUT AN OPERATING CONTROL TOWER FOR SCHEDULED PASSENGER OPERATIONS. C080 is used to authorize terminal area IFR operations for scheduled passenger operations in Class G airspace or at airports without an operating control tower.

A. Before authorizing scheduled terminal area IFR operations in Class G airspace or at airports without an operating control tower, the POI must obtain and list the following information in C080.

(1) Names of airports.

(2) Sources of weather information to be used by flightcrews (see Order 8400.10, volume 3, chapter 7, section 3, and Order 8700.1, volume 2, chapter 76).

(3) Source of traffic and airport advisories.

B. Sources of Traffic and Airport Advisories. Certificate holders may be authorized to use any two-way radio source of air traffic advisory information listed in the AIM (for operations in U.S. airspace) or equivalent aeronautical information publications (for foreign operations).

(1) These sources include common traffic advisory frequencies, UNICOM, MULTICOM, and flight service stations.

(2) If an air traffic advisory source is also suitable for determining the status of airport services and facilities, it is the only source which needs to be listed in C080.

(3) When airport services and facilities information is on a different frequency, both sources should be listed in C080.

(4) In those cases where two sources are listed at the same airport, inspectors must ensure the operator's manuals have procedures which require pilots to continuously monitor and use the traffic advisory frequency when operating within 10 nautical miles of the airport. The procedures should require communication concerning airport services and facilities to be completed while more than 10 nautical miles from the airport.

(5) At some airports no public use frequencies may be available. In those cases, a certificate holder must arrange for radio communication of essential information including surveillance of local or transient aircraft operations by ground personnel. Ground personnel, who operate a company radio for airport status and traffic advisory, must be able to view airspace around the airport.

C. This operations specification, C080, may need to be issued to the certificate holder authorized scheduled passenger operations in order for the C081, Special Non 14CFR Part 97 Instrument Approach or Departure

Procedures, to be issued.

D. C080 is not applicable for Part 125 operators.

OPSPEC C081 - SPECIAL NON 14 CFR PART 97 INSTRUMENT APPROACH OR DEPARTURE PROCEDURES. C081 authorizes special non Part 97 instrument approach or departure procedures and is applicable to Part 121, 125/135, 125, and 135 certificate holders.

A. C081 may require the authorization of OpSpec C064 and/or C080, as applicable.

B. *Special Terminal Instrument Approach or Departure Procedures. (TBD).* (See 8400.10, Volume 4, chapter 2, section 9, Authorization for the Use of Special Terminal Instrument Procedures or contact your regional flight procedures branch for more information.)

C. For helicopter authorization, see OpSpec H122.

OPSPEC/MSPEC C359. SPECIAL AUTHORIZATION FOR CERTAIN CATEGORY II OPERATIONS AT SPECIFICALLY APPROVED FACILITIES. Operations Specification/Management Specification (OpSpec/MSpec) C359 is a special authorization for Category II (CAT II) operations to approved instrument landing system (ILS) runways which do not have touchdown zone (TDZ) and centerline lighting (CL) or CAT II approach lighting systems with sequenced flashing lights (Approach Lighting System with Sequenced Flashing Lights (ALSF)-1 & 2). (For special authorization for lower-than-standard CAT I operations to runway visual range (RVR) 1800, see OpSpec/MSpec C074.)

A. These special authorization CAT II operations at specifically approved facilities with a single RVR reporting system are limited to a decision height (DH) of 100 feet and no lower than RVR 1600. An approved runway facility with two RVR reporting systems will be limited to DH of 100 feet and no lower than RVR 1200.

B. These special authorization CAT II approaches labeled as "Special Aircrew and Aircraft Certification Required" cannot be authorized except in accordance with the limitations and provisions of this OpSpec/MSpec and

the following:

(1) Conducted only when using an autoland system or a head-up guidance system (HGS) to touch down.

(2) Only aircraft certified for autoland or HGS to touchdown capability are eligible for these operations. Those aircraft and equipment must be listed in Table 2 of OpSpec/MSpec C059.

(3) Should the autoland system or HGS malfunction or be disengaged during the approach, the pilot-in-command (PIC) must execute a missed approach not later than arrival at DH.

(4) Pilots must be trained in the use of the autoland system or HGS, as applicable, and demonstrate proficiency in ILS approaches to minimums using this equipment on checks conducted to satisfy Title 14 of the Code of Federal Regulations (14 CFR) part 91, section 91.1069, part 121, section 121.441, or part 135, section 135.297, as applicable.

(5) The certificate holder/program manager must be authorized for CAT II operations and issued OpSpec/MSpec C059.

C. *Authorized Airports and Runways.*

(1) The approved airports and runways required to be listed in OpSpec/MSpec C359 are those specific facilities that have been approved for these special authorization CAT II operations in accordance with the procedures and requirements in Order 8400.13, Procedures for the Approval of Special Authorization Category II and Lowest Standard Category I Operations, as amended. Once a facility has been approved and charted in accordance with part 97, it can be listed on OpSpec/MSpec C359.

(2) These special authorization CAT II operations can also be conducted at runways approved for CAT II and CAT III operations under either OpSpec/MSpec C059 or C060 and need not be listed in OpSpec/MSpec C359.

(3) When lighting components, i.e., touchdown zone and runway centerline lights, that are normally required for CAT II or CAT III operations become inoperative, the operations authorized under OpSpec/MSpec C359 may be conducted without having listed those airports and runways in OpSpec/MSpec C359, provided all the requirements of OpSpec/MSpec C359 are met.

85. - 90. RESERVED.